PUBLIC HEALTH Bulletin

COUNTY OF ORANGE • HEALTH CARE AGENCY

VOLUME 51, NUMBER 3 FALL 2001

The role of providers in bioterrorism surveillance

The most critical step in response to a possible bioterrorism event is early recognition that something unusual is occurring and reporting this to the Orange County Health Care Agency (HCA). The earliest presentation of the clinical signs and symptoms of bioterrorism may occur in an emergency room, urgent care center or physician's practice, making it essential that community providers have a working knowledge of the reporting process.

How to report

- Please make note of the following phone numbers for the legally mandated reporting of communicable diseases, ***including unusual illnesses and outbreaks***. The after hours number is staffed 24 hours per day, 7 days per week by Orange County Sheriff Communications. It is for use by **physicians and health care facilities only, NOT the general public**.
  - Monday – Friday, 8:00 am to 5:00 pm: (714) 834-8180; fax (714) 834-8196.
  - After hours, weekends and holidays telephone (Sheriff Communications, ask for the Public Health Official on call): (714) 628-7008

What to report

- ***Legally reportable diseases in California—see list, also available at:*** http://www.oc.ca.gov/hca/docs/forms/diseases.pdf
- Worrisome clinical syndromes in worrisome clinical settings

Worrisome clinical settings

- Unusual numbers of cases of unexplained diseases or deaths
- Higher morbidity and mortality in association with a common disease or syndrome, or failure of such patients to respond to usual therapy
- Many ill persons seeking treatment at about the same time
- Illness associated with a ventilation system
- A disease that is:
  - unusual for a given geographic area
  - occurs outside the normal transmission season
  - occurs in the absence of the normal vector for transmission
- Illness that is unusual (or atypical) for a given population or age group
- Atypical host characteristics:
  - Young (< 50 years)
  - Immunologically intact
  - No underlying illness
  - No recent international travel or other exposure to potential source of infection
- Unusual patterns of death or illness among animals that precedes or accompanies illness or death in humans

Worrisome clinical syndromes

- Acute severe pneumonia or respiratory disease
- Encephalitis syndrome
- Unexplained rash with fever
- Fever with mucous membrane bleeding
- Unexplained death or paralysis

(Continued on Page 2)

This Issue . . .

HEALTH CARE PROVIDER INFORMATION

ORANGE COUNTY HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
EPIDEMIOLOGY & ASSESSMENT

The following phone numbers are to be used by health care providers for the legally mandated reporting of communicable diseases, including unusual illness and outbreaks. The after hours number is staffed 24 hours per day, 7 days per week by Orange County Sheriff Communications.

Monday-Friday, 8:00 a.m. to 5:00 p.m.
(714) 834-8180 — Fax (714) 834-8196

After hours, weekends and holidays telephone (when contacting Sheriff's Communications, ask for Public Health Official on-call):

(714) 628-7008

Bioterrorism *(Continued from Page 1)*

- Septicemia/toxic shock

Response to a Possible Bioterrorism Event

HCA will notify and activate all other government agencies that would be involved in responding to a bioterrorist event. In such an event, the Orange County Health Care Agency will be responsible for:

Bacillus anthracis vegetative cells – the rod-shaped bacteria that are the cause of anthrax – are pictured in this photomicrograph from the official U.S. Department of Defense anthrax information Web site.

- Case investigation and case finding
- Establishing a diagnosis
- Notifying
  - California Department of Health Services
  - Centers for Disease Control & Prevention (CDC)
  - FBI and local law enforcement
- Recommending treatment and infection control measures

(Please note that treatment recommendations made in response to a bioterrorist event may differ from published recommendations due to the circumstances—antimicrobial resistance of the agent, availability of pharmaceuticals, etc.)

- Establishing exposure date(s) and location(s)
- Identifying exposed persons
- Following up cases and contacts
- Providing mass prophylaxis (if indicated)

All of the above steps will be initiated by HCA based on provider or laboratory notification and the outcome of HCA's investigation of the case or cases reported.

Handling of Suspicious Packages or Envelopes

(adapted from MMWR, October 26, 2001)

- Do not shake or empty the contents of a suspicious package or envelope.
- Do not carry the package or envelope, show it to others, or allow others to examine it.
- Put the package or envelope on a stable surface; do not sniff, touch, taste, or look closely at it or any contents that may have spilled.
- Alert others in the area about the suspicious package or envelope. Leave the area, close any doors, and take actions to prevent others from entering the area. If possible, shut off the ventilation system.
- Wash hands with soap and water to prevent spreading potentially infectious material to face or skin. Seek additional instructions for exposed or potentially exposed persons.
- If at work, notify a supervisor, a security officer, or a law enforcement official.
- If at home, contact the local law enforcement agency.
- If possible, create a list of persons who were in the room or area when this suspicious letter or package was recognized and a list of persons who also may have handled this package or letter.
- Contact local law enforcement.
- Law enforcement performs threat assessment and contacts FBI as needed.
- If no credible threat exists, incident is closed without further testing.
- If credible threat exists, FBI notifies Health Care Agency and arranges for laboratory testing of specimen (and environment, if indicated).
- HCA/Public Health initiates epidemiologic investigation.

Nasal swabs and serologic testing: These tests have ***no*** value in determining if a patient is infected or should be given prophylactic antibiotics. These tests are research tools with unknown sensitivity and specificity and are being used ONLY as part of the investigation of a KNOWN anthrax exposure event. They should be done only at the request of Public Health officials.

Resources

- The Centers for Disease Control and Prevention (CDC) web site at:
  http://www.bt.cdc.gov/
- Bioterrorism postings on our web site:
  http://www.oc.ca.gov/hca/public/bio.htm
- The Morbidity and Mortality Weekly Report (MMWR) from CDC:
  http://www.cdc.gov/mmwr/index.html
- U.S. Public Health Service's Advisory Committee on Immunization Practices recommendations on smallpox vaccination:
  http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5010a1.htm
- U.S. Public Health Service's Advisory Committee on Immunization Practices recommendations on anthrax vaccination:
  http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4915a1.htm
- *JAMA* articles (available at:
  http://jama.ama-assn.org/
  - Anthrax as a Biological Weapon. May 12, 1999 (Vol 281, No 18: 1735-1745)
  - Smallpox as a Biological Weapon. June 9, 1999 (Vol 281, No 22: 2127-2137)
  - Plague as a Biological Weapon. May 3, 2000 (Vol 283, No 17:2281-2289)
  - Botulinum toxin as a Biological Weapon. Feb. 28, 2001 (Vol 285, No. 8: 1059-1070)
  - Tularemia as a Biological Weapon. June 6, 2001 (Vol 285, No. 21:2763-2773)
- Emerging Infectious Diseases: Bioterrorism-Related Inhalational Anthrax: The First 10 Cases Reported in the United States November-December 2001 (Vol. 7, No. 6), available on the World Wide Web at:
  http://www.cdc.gov/ncidod/eid/vol7no6/jernigan.htm
- World Health Organization smallpox slide set and tutorial:
  http://www.who.int/emc/diseases/smallpox/slideset/index.htm

Clinical features of potential bioterrorism agents

The Centers for Disease Control (CDC) defines three categories of biologic agents with potential to be used as weapons, based on ease of dissemination or transmission, potential for major public health impact (e.g., high mortality), potential for public panic and social disruption, and requirements for public health preparedness. Agents of highest concern are *Bacillus anthracis* (anthrax), *Yersinia pestis* (plague), variola major (smallpox), *Clostridium botulinum* toxin (botulism), *Francisella tularensis* (tularemia), filoviruses (Ebola hemorrhagic fever, Marburg hemorrhagic fever); and arenaviruses (Lassa [Lassa fever], Junin [Argentine hemorrhagic fever], and related viruses). The following summarizes the clinical features of these agents.

Anthrax. A nonspecific prodrome (i.e., fever, dyspnea, cough, and chest discomfort) follows inhalation of infectious spores. Approximately 2-4 days after initial symptoms, sometimes after a brief period of improvement, respiratory failure and hemodynamic collapse ensue. Inhalational anthrax also might include thoracic edema and a widened mediastinum on chest radiograph. Gram-positive bacilli can grow on blood culture, usually 2-3 days after onset of illness. Cutaneous anthrax follows deposition of the organism onto the skin, occurring particularly on exposed areas of the hands, arms, or face. An area of local edema becomes a pruritic macule or papule, which enlarges and ulcerates after 1-2 days. Small, 1-3 mm vesicles may surround the ulcer. A painless, depressed, black eschar usually with surrounding local edema subsequently develops. The syndrome also may include lymphangitis and painful lymphadenopathy.

Plague. Clinical features of pneumonic plague include fever, cough with muco-purulent sputum (gram-negative rods may be seen on gram stain), hemoptysis, and chest pain. A chest radiograph will show evidence of bronchopneumonia.

Botulism. Clinical features include symmetric cranial neuropathies (i.e., drooping eyelids, weakened jaw clench, and difficulty swallowing or speaking), blurred vision or diplopia, symmetric descending weakness in a proximal to distal pattern, and respiratory dysfunction from respiratory muscle paralysis or upper airway obstruction without sensory deficits. Inhalational botulism would have a similar clinical presentation as foodborne botulism; however, the gastrointestinal symptoms that accompany foodborne botulism may be absent.

Smallpox (variola). The acute clinical symptoms of smallpox resemble other acute viral illnesses, such as influenza, beginning with a 2-4 day nonspecific prodrome of fever and myalgias before rash onset. Several clinical features can help clinicians differentiate varicella (chickenpox) from smallpox. The rash of varicella is most prominent on the trunk and develops in successive groups of lesions over several days, resulting in lesions in various stages of development and resolution. In comparison, the vesicular/pustular rash of smallpox is typically most prominent on the face and extremities, and lesions develop at the same time.

Inhalational tularemia. Inhalation of *F. tularensis* causes an abrupt onset of an acute, nonspecific febrile illness beginning 3-5 days after exposure, with pleuropneumonitis developing in a substantial proportion of cases during subsequent days.

Hemorrhagic fever (such as would be caused by Ebola or Marburg viruses). After an incubation period of usually 5-10 days (range: 2-19 days), illness is characterized by abrupt onset of fever, myalgia, and headache. Other signs and symptoms include nausea and vomiting, abdominal pain, diarrhea, chest pain, cough, and pharyngitis. A maculopapular rash, prominent on the trunk, develops in most patients approximately 5 days after onset of illness. Bleeding manifestations, such as petechiae, ecchymoses, and hemorrhages, occur as the disease progresses.

Source: Centers for Disease Control and Prevention MMWR - October 19, 2001

Distinguishing Smallpox from Chickenpox

Chickenpox (varicella), which infects millions of children each year in the United States, is the disease most frequently confused with smallpox. There are key differences between the two diseases:

	SMALLPOX (Variola)	*CHICKENPOX (Varicella)*
Incubation	7-17 days	14-21 days
Prodrome (illness prior to rash)	2-4 days	minimal/none
Distribution	1. Lesions initially tend to develop on the face and extremities, progressing to the trunk of the body. 2. Rash found on palms and soles.	1. Lesions initially tend to develop on the trunk of the body, progressing to the face and extremities. Lesions also tend to be more abundant on trunk than on face and extremities. 2. Rash rarely found on palms and soles.
Depth of Rash	Deeply embedded	Superficial
Progression of rash	Lesions develop and progress at the same rate.	Lesions appear successively and progress at varying rates.
Scab formation	10-14 days after rash onset	4-7 days after rash onset
Scab separation	14-28 days after rash onset	<14 days after rash onset
Communicable period	From rash onset until all scabs have separated (3-4 weeks after onset of rash). Most infectious during the first week of rash, after prodrome.	As long as 5 days (but usually 1-2 days) before rash onset until all lesions are crusted (usually about 5 days after rash onset). Most infectious 1-2 days before rash onset and for first few days of rash.

For further information regarding smallpox: contact Orange County Public Health/Epidemiology: (714) 834-8180 or go to: JAMA consensus article: Smallpox as a Biological Weapon: http://jama.ama-assn.org/issues/v281n22/ffull/jst90000.html or: U.S. Public Health Service's Advisory Committee on Immunization Practices recommendations on smallpox vaccination: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5010a1.htm

Adapted from: Los Angeles County Department of Health Services, Acute Communicable Disease Control

Hepatitis A, water exposure and vaccine

Recent media reports in Orange County indicate that some physicians are recommending hepatitis A vaccine for their pediatric patients who are exposed to recreational bodies of water. The media also cited surfers as being concerned about contracting hepatitis A from ocean exposure. Because of these reports, it is timely and useful to review the transmission of hepatitis A virus (HAV) and recommendations for use of hepatitis A vaccine.

Transmission and Epidemiology

HAV is spread by the fecal-oral route, primarily through person–to-person contact and less frequently through contaminated food. Exposure to recreational bodies of water is not considered a risk factor for HAV infection in the United States or here in California. Infected persons excrete the virus in their stool for approximately two weeks before to one week after the onset of jaundice.

Foodborne HAV infection can occur when an infected person, especially one with diarrhea, does not wash his/her hands well after a bowel movement (or after changing the diapers of someone with HAV infection) and contaminates food that is not subsequently cooked. Children under the age of 6 years rarely have significant symptoms of hepatitis and often serve as silent transmitters of the infection to others, primarily household and day-care contacts.

The rate of HAV infection in the United States has been declining for many years, with dampening and lengthening of epidemic cycles that previously occurred approximately every 10 years. In Orange County, the rate of HAV infection has declined dramatically since 1977, when there were 638 reported cases, a rate of 35.7 per 100,000 population (see chart). The Orange County rate for the year 2000 was 8.6 per 100,000 (245 cases). In California, the rate of hepatitis A infection declined 58% from 1996 to 2000 (from 20.5 to 8.7 per 100,000), while the United States rate declined 62% (from 11.7 to 4.4 per 100,000).

Hepatitis A Vaccine Recommendations

The current Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices recommendations for use of the hepatitis A vaccine are as follows.

- Routine vaccination for all California children age 2 years and older. This recommendation was based on the 10-year average rate of hepatitis A from 1987 – 1997. California's rate of HAV infection was twice the national average during that time period.
- Persons traveling to or working in countries that have high or intermediate endemicity of infection (i.e., areas other than Canada, western Europe, Japan, Australia, or New Zealand).
- Men who have sex with men
- Illegal drug users
- Persons who work with HAV-infected primates or with HAV in a research laboratory setting. No other occupational groups have been shown to have increased risk for HAV infection, including U.S. sewage workers exposed to raw sewage.
- Persons who have clotting-factor disorders
- Susceptible persons who have chronic liver disease

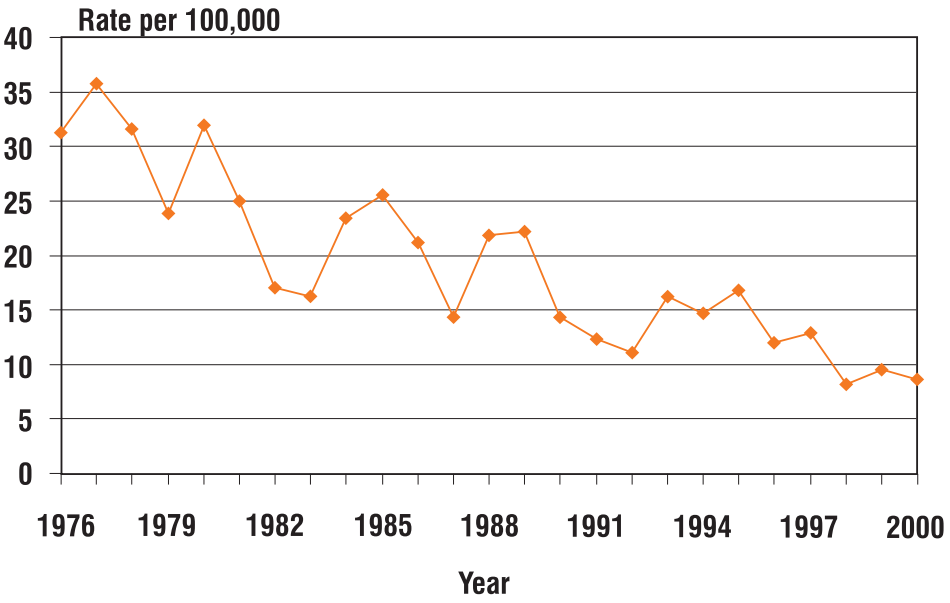
Protection can be assumed by 4 weeks after the first dose of vaccine. The second dose, given 6-12 months after the first dose, is necessary for long-term protection.

Hepatitis A vaccine is available free of charge for children aged 2-18 years through the Vaccines for Children (VFC) program and Orange County Public Health programs. The Orange County Health Referral line at (800) 564-8448 provides information on the locations where the free vaccine is available.

The physician's role in controlling community transmission of Hepatitis A includes being alert to the possibility of Hepatitis A infection, testing appropriately, reporting cases to Public Health (Epidemiology & Assessment, telephone (714) 834-8180; fax (714) 834-8196), reinforcing good hygiene and food preparation practices, and encouraging universal vaccination against Hepatitis A.

More information on Hepatitis A can be found at www.cdc.gov/ncidod/diseases/hepatitis/a/index.htm.

Figure: Hepatitis A, Orange County, 1976-2000



COUNTY OF ORANGE, CA ▪ HEALTH CARE AGENCY ▪ PUBLIC HEALTH

CONFIDENTIAL MORBIDITY REPORT

NOTE: For STD, Hepatitis, or TB, complete appropriate section below. Special reporting requirements and reportable diseases on back.

DISEASE BEING REPORTED: _____ If applicable, specimen date ___ ___ ___ (MONTH DAY YEAR) Source: _____

Patient's Last Name

Social Security Number ___ — ___ — ___

First Name and Middle Name

Birth Date ___ ___ ___ (MONTH DAY YEAR) **Age**

Address: Number, Street **Apt./Unit Number**

City/Town **State** **Zip Code**

Area Code **Home Telephone** ___ — ___ — ___

Gender M F

Pregnant? Y N UNK

Estimated Delivery Date ___ ___ ___ (MONTH DAY YEAR)

Area Code **Work Telephone** ___ — ___ — ___

Patient's Occupation/Setting
- ☐ Food service
- ☐ Day care
- ☐ Correctional facility
- ☐ Health care
- ☐ School
- ☐ Other: _____

Ethnicity (✓ one)
- ☐ Hispanic/Latino
- ☐ Non-Hispanic / Non-Latino

Race (✓ one)
- ☐ African-American/Black
- ☐ Asian / Pacific Islander (3 one)
  - ☐ Asian-Indian
  - ☐ Japanese
  - ☐ Cambodian
  - ☐ Korean
  - ☐ Chinese
  - ☐ Laotian
  - ☐ Filipino
  - ☐ Samoan
  - ☐ Guamanian
  - ☐ Vietnamese
  - ☐ Hawaiian
  - ☐ Other: _____
- ☐ Native American / Alaskan Native
- ☐ White
- ☐ Other: _____

DATE OF ONSET ___ ___ ___ (MONTH DAY YEAR)

DATE DIAGNOSED ___ ___ ___ (MONTH DAY YEAR)

DATE OF DEATH ___ ___ ___ (MONTH DAY YEAR)

Reporting Health Care Provider

Reporting Health Care Facility

Address

City **State** **Zip Code**

Telephone Number ( ) **Fax** ( )

Submitted By **Date Submitted** ___ ___ ___ (MONTH DAY YEAR)

REPORT TO:

Orange County Public Health

Fax: (714) 834-8196

Mail: P.O. Box 6128
Santa Ana, CA 92706-0128

Phone: (714) 834-8180

SEXUALLY TRANSMITTED DISEASES (STD)

Syphilis
- ☐ Primary (lesion present)
- ☐ Secondary
- ☐ Early latent < 1 year
- ☐ Latent (unknown duration)
- ☐ Late latent > 1 year
- ☐ Late (tertiary)
- ☐ Congenital
- ☐ **Neurosyphilis**

Syphilis Test Results
- ☐ RPR Titer: _____
- ☐ VDRL Titer: _____
- ☐ FTA/MHA: ☐ Pos ☐ Neg
- ☐ CSF-VDRL: ☐ Pos ☐ Neg
- ☐ Other: _____

Gonorrhea
- ☐ Urethral/Cervical
- ☐ PID
- ☐ Other: _____

Chlamydia
- ☐ Urethral/Cervical
- ☐ PID
- ☐ Other: _____

- ☐ **PID (Unknown Etiology)**
- ☐ **Chancroid**
- ☐ **Non-Gonococcal Urethritis**

STD TREATMENT INFORMATION
- ☐ **Treated (Drugs, Dosage, Route)**

_____

_____

Date Treatment Initiated ___ ___ ___ (MONTH DAY YEAR)

- ☐ **Untreated**
  - ☐ Will treat
  - ☐ Unable to contact patient
  - ☐ Refused treatment
  - ☐ Referred to: _____

VIRAL HEPATITIS
- ☐ **Hep A**
- ☐ **Hep B**
  - ☐ **Acute**
  - ☐ **Chronic**
- ☐ **Hep C**
  - ☐ **Acute**
  - ☐ **Chronic**
- ☐ **Hep D (Delta)**
- ☐ **Other:** _____

Please send copies of the hepatitis serologies (required for diagnosis) and liver enzymes (if done).

Suspected Exposure Type
- ☐ Blood transfusion
- ☐ Other needle exposure
- ☐ Sexual contact
- ☐ Household contact
- ☐ Child care
- ☐ Other: _____

TUBERCULOSIS (TB)

Status
- ☐ **Active Disease**
  - ☐ Confirmed
  - ☐ Suspected
- ☐ **Infected, No Disease**
  - ☐ Converter
  - ☐ Reactor

Site(s)
- ☐ Pulmonary
- ☐ Extra-Pulmonary
- ☐ Both

Mantoux TB Skin Test

Date Performed ___ ___ ___ (MONTH DAY YEAR)

Results _____ mm ☐ Pending ☐ Not done

Chest X-ray

Date Performed ___ ___ ___ (MONTH DAY YEAR)

- ☐ Normal ☐ Pending ☐ Not done
- ☐ Cavitary ☐ Abnormal/Noncavitary

Bacteriology

Date Specimen Collected ___ ___ ___ (MONTH DAY YEAR)

Source: _____

Smear: ☐ Pos ☐ Neg ☐ Pending ☐ Not done

Culture: ☐ Pos ☐ Neg ☐ Pending ☐ Not done

Other test(s): _____

_____

_____

TB TREATMENT INFORMATION
- ☐ **Current Treatment**
  - ☐ INH ☐ RIF ☐ PZA
  - ☐ EMB ☐ Other: _____

Date Treatment Initiated ___ ___ ___ (MONTH DAY YEAR)

- ☐ **Untreated**
  - ☐ Will treat
  - ☐ Unable to contact patient
  - ☐ Refused treatment
  - ☐ Referred to: _____

REMARKS

Please report the following diseases/conditions, including probable cases, to Disease Control and Epidemiology using the *specified method and time frame.*

DCE, P.O. Box 6128, Santa Ana, CA 92706-0128
Telephone: (714) 834-8180, Fax: (714) 834-8196
http://www.oc.ca.gov/hca/public/cdce.htm

If a report is urgent and it is a holiday, weekend, or after regular work hours, please contact the public health official on call at (714) 628-7008.

☎ **REPORT IMMEDIATELY** by telephone to Epidemiology.
❶ Report within **ONE WORKING DAY OF** identification by telephone, fax, or mail to Epidemiology.
⑦ Report within **7 CALENDAR DAYS** of identification by telephone, fax, or mail to Epidemiology.
✶ When **two (2) or more cases or suspected cases of foodborne illness** from separate households are suspected to have the **same source of illness**, please **REPORT IMMEDIATELY** by telephone to Epidemiology.

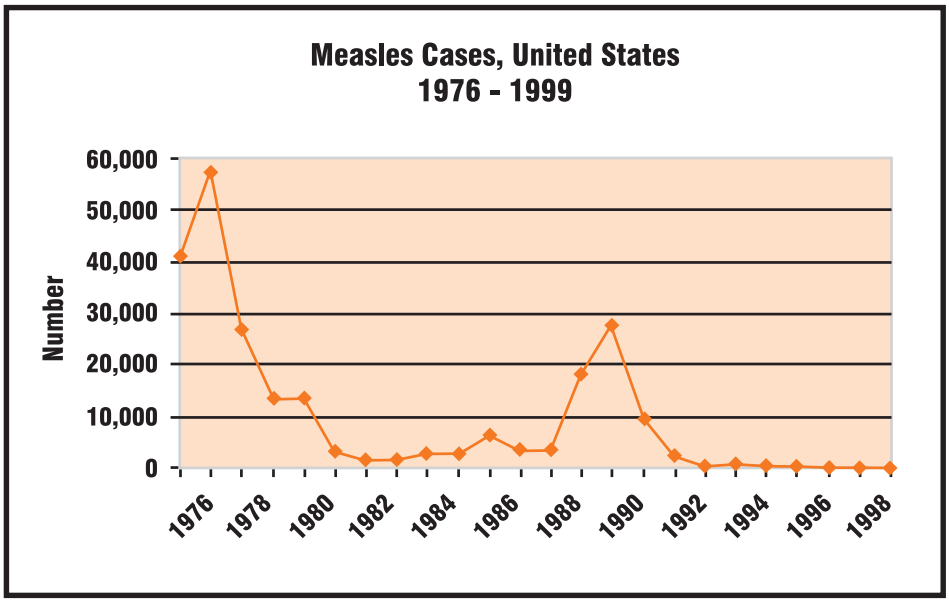
⑦ AIDS **[Please call, DO NOT FAX REPORT]**
❶ Amebiasis
❶ Anisakiasis
☎ Anthrax
❶ Babesiosis
☎ Botulism (infant, foodborne, wound)
☎ Brucellosis
❶ Campylobacteriosis
⑦ Chancroid
⑦ Chlamydial infections
☎ Cholera
☎ Ciguatera Fish Poisoning
⑦ Coccidioidomycosis
❶ Colorado Tick Fever
❶ Conjunctivitis, acute infections of the newborn–please specify etiology
❶ Cryptosporidiosis
⑦ Cysticercosis
☎ Dengue
☎ Diarrhea of newborn, outbreaks only
☎ Diphtheria
☎ Domoic Acid Poisoning (Amnesic Shellfish Poisoning)
⑦ Echinococcosis (Hydatid Disease)
⑦ Ehrlichiosis
❶ Encephalitis–please specify etiology
☎ *Escherichia coli* O157:H7 infection
✶ Foodborne disease
⑦ Giardiasis
⑦ Gonococcal infections
❶ *Haemophilus influenzae*, invasive disease
☎ Hantavirus infections
☎ Hemolytic Uremic Syndrome
❶ Hepatitis A
⑦ Hepatitis B (specify acute case or chronic)
⑦ Hepatitis C (specify acute case or chronic)
⑦ Hepatitis D (Delta)
⑦ Hepatitis, other, acute
⑦ HIV (Must have patient's consent. Please call, DO NOT FAX REPORT)
⑦ Kawasaki Syndrome (Mucocutaneous Lymph Node Syndrome)
⑦ Legionellosis
⑦ Leprosy (Hansen's Disease)
⑦ Leptospirosis
❶ Listeriosis
⑦ Lyme Disease
❶ Lymphocytic Choriomeningitis
❶ Malaria
❶ Measles (Rubeola)
❶ Meningitis–please specify etiology
☎ Meningococcal infections
⑦ Mumps
⑦ Non-Gonococcal Urethritis (excluding lab confirmed chlamydial infections)
☎ Outbreaks
☎ Paralytic Shellfish Poisoning
⑦ Pelvic Inflammatory Disease (PID)
❶ Pertussis (Whooping Cough)
☎ Plague, human or animal
❶ Poliomyelitis, paralytic
❶ Psittacosis
❶ Q Fever
☎ Rabies, human or animal
❶ Relapsing Fever
⑦ Reye Syndrome
⑦ Rheumatic Fever, acute
⑦ Rocky Mountain Spotted Fever
⑦ Rubella (German Measles)
⑦ Rubella Syndrome, congenital
❶ Salmonellosis (other than Typhoid Fever)
☎ Scombroid Fish Poisoning
❶ Shigellosis
☎ Smallpox (Variola)
❶ Streptococcal infections (*invasive disease caused by group A streptococcus*; outbreaks of any type; individual cases in food handlers and dairy workers only)
❶ Swimmer's Itch (Schistosomal Dermatitis)
❶ Syphilis
⑦ Taeniasis (request of local health officer)
⑦ Tetanus
⑦ Toxic Shock Syndrome
⑦ Toxoplasmosis
❶ Trichinosis
❶ Tuberculosis (including suspected cases)
☎ Tularemia
❶ Typhoid Fever, cases and carriers
⑦ Typhus Fever
☎ Unusual diseases
☎ Varicella (deaths only)
❶ *Vibrio* infections
☎ Viral Hemorrhagic Fevers (e.g., Crimean-Congo, Ebola, Lassa, and Marburg viruses)
❶ Water-associated disease
☎ Yellow Fever
❶ Yersiniosis

Noncommunicable Diseases/Conditions reportable to DCE (Title 17, Sections 2810-2812): Disorders characterized by lapses of consciousness, including Alzheimer's disease and related disorders, in persons 14 years and older; Cancer [except (1) basal and squamous skin cancer unless occurring on genitalia, and (2) carcinoma in-situ and CIN III of the cervix] is reportable to the local cancer registry [CSPOC – (949) 824-7401].
(Rev. 11/01)

Measles awareness important

Measles (rubeola) has become a rare disease in the United States, and many of the cases that do occur are imported from or result from exposure in other areas of the world. Since many physicians have never seen a case of measles, the following is a review of the clinical signs and symptoms, differential diagnosis, and laboratory confirmation of measles. Measles must be reported to Orange County Public Health Epidemiology & Assessment at (714) 834-8180 within one day of diagnosis based on the clinical assessment, before laboratory results are available.

Measles incidence in the United States has declined dramatically since introduction of vaccine in 1963, when there were more than 450,000 cases. The decline has continued in the last few decades, with the exception of a major outbreak in 1989-1991 (see figure). In 1999, only 100 cases were reported. Of these, 33 were imported infections (14 international visitors and 19 U.S. residents exposed while traveling abroad). Another 34 of the 100 cases were linked to imported cases. The most recent case in Orange County, in July 2001, was in a 10 year-old Japanese tourist.



Symptoms

Prodrome: Measles is an acute viral illness beginning with a characteristic prodrome of fever, conjunctivitis, coryza and cough. The prodrome typically starts 3-4 days (range 1-7 days) before the rash appears. Fever reaches at least 101°F (often peaking as high as 103-105°F) by the day of rash onset. Koplik's spots are bluish-white dots on an erythematous base on buccal mucosa opposite molars and can appear on the soft palate. These are present from 1-2 days before to 1-2 days after rash onset, and patients are usually quite ill during this time period.

Rash: The maculopapular rash begins at the hairline. During the next three days, the rash gradually proceeds downward and outward, reaching hands and feet. It is rarely seen on the palms and soles. The rash lasts four to seven days or longer, often becoming confluent (especially on the upper body), and fades in the same order it appeared, from head to feet. Fine desquamation occurs over more severely involved areas. Go to: http://phil.cdc.gov/Phil/default.asp and type "measles" into the "Search" box to view pictures of measles exanthem. Images of other viral rash illnesses are also available at the site.

Laboratory Diagnosis

Because measles is a rare disease, it is important to confirm the diagnosis through serologic testing. The detection of measles-specific IgM antibodies, which are present by three to four days after rash onset, or earlier with more sensitive tests, is diagnostic. False-positive results do occur in some laboratories using commercial test kits. Diagnosis can also be made by demonstrating a significant rise in IgG antibody concentrations between acute and convalescent sera; however, this delays diagnosis and patients are often unwilling to return for the convalescent blood draw. Virus isolation from a nasopharyngeal or urine specimen, while not useful for timely diagnosis, is performed by the Centers for Disease Control and Prevention (CDC) to track the distribution of different measles virus genotypes and determine patterns of importation and transmission. Consult with Public Health Epidemiology & Assessment at (714) 834-8180 to arrange for IgM antibody testing and viral isolation. These tests will be done at no charge.

Differential Diagnosis

Distinguishing measles from other diseases that may manifest similar symptoms is of prime importance. The following list of diseases must be ruled out.

1) **Rubella (German measles):** A rare disease due to vaccine coverage. The symptoms are milder, with a rash of shorter duration that is fine and discrete, not confluent or blotchy. Periaural lymphadenopathy is often present, and subclinical infection is common. Serologies (IgM antibody and acute and convalescent IgG) should be done.

2) **Scarlet fever:** Rash occurs within 12 to 14 hours of onset of fever and sore throat. The rash is more concentrated in the warm areas of the body and skin folds and has a "sandpaper" texture. Patients may also have flushed cheeks, circumoral pallor and "strawberry tongue." Throat culture is usually positive for Group A streptococcus.

3) **Roseola (Exanthem subitum, sixth disease):** Viral illness generally seen in infants and toddlers under the age of four. There is usually a three to four day prodrome of high fever and irritability. The temperature falls as a discrete, rosy red maculopapular rash starts, lasting two or three days.

4) **Fifth disease (Erythema infectiosums, parvovirus B19):** A viral illness with no prodrome and little or no fever, with a three-stage rash: (1) red flushed cheeks (slapped cheek); (2) maculopapular rash with lace-like appearance when fading, particularly on extremities; (3) recurrences with heat, exercise and other stimuli.

5) **Kawasaki syndrome:** An acute illness with an unknown cause, characterized by high, spiking fever for at least five days. Other symptoms include: (1) bilateral conjunctival injection; (2) injected or fissured lips, injected pharynx, or "strawberry tongue"; (3) erythema of palms or soles, edema of the hands or generalized periungual desquamation; (4) rash; and (5) cervical lymphadenopathy.

6) **Enteroviral infections:** The rash is variable, and these infections do not usually have marked respiratory symptoms.

Preventive Measures

Each healthcare facility or provider office should have a policy on immunizations for all staff with direct patient contact. General recommendations can be found in the CDC's guideline for immunization of health care workers (MMWR Vol. 46, No. 18, 12/26/97), available at http://www.cdc.gov/mmwr/preview/mmwrhtml/00050577.htm. Potentially exposed persons, including patients and staff, need to be assessed and counseled. Call Communicable Epidemiology & Assessment at (714) 834-8180 for advice and assistance.

ORANGE COUNTY REPORTED CASES OF SPECIFIED NOTIFIABLE DISEASES

First-Third Quarters (Weeks 1-39)
Number of Cases by Year of Report (YTD)

DISEASE	2001	2000	1999	1998
AIDS	213	228	219	220
AMEBIASIS	19	16	16	21
CAMPYLOBACTERIOSIS	209	253	178	223
CHLAMYDIA	4512	3684	3825	2626
CRYPTOSPORIDIOSIS	5	1	4	15
E-COLI O157:H7	6	28	9	8
FOOD POISONING OUTBREAKS	29	11	18	2
GIARDIASIS	125	183	184	210
GONOCOCCAL INFECTION	517	444	406	414
H-FLU, INVASIVE DISEASE	3	4	4	4
HANSEN'S DISEASE, LEPROSY	0	1	1	4
HEPATITIS A (acute)	117	209	193	179
HEPATITIS B (acute)	39	43	35	68
HEPATITIS B (chronic)	1192	1171	1126	1225
HEPATITIS C (acute)	8	4	10	7
HEPATITIS C (chronic)	1936	1912	1865	1269
HEPATITIS OTHER/UNSPECIFIED	9	18	29	17
KAWASAKI DISEASE	13	13	14	14
LISTERIOSIS	11	9	6	9
MALARIA	11	12	7	12
MEASLES (RUBEOLA)	5	1	4	2
MENINGITIS, TOTAL	217	258	205	512
ASEPTIC MENINGITIS	193	204	163	455
MENINGOCOCCAL INFECTIONS	13	19	12	22
MUMPS	2	4	2	8
NON-GONOCOCCAL URETHRITIS	508	535	386	478
PERTUSSIS	12	15	34	8
PELVIC INFLAMMATORY DISEASE	46	57	11	52
RUBELLA	0	2	0	0
SALMONELLOSIS	190	290	203	244
SHIGELLOSIS	86	158	125	119
STREP, INVASIVE GROUP A	29	30	29	51
SYPHILIS, TOTAL	143	173	171	124
PRIMARY	14	4	14	8
SECONDARY	17	17	14	6
EARLY LATENT	17	16	29	6
LATENT	5	4	4	0
LATE LATENT	90	121	106	97
CONGENITAL	0	10	3	7
NEUROLOGICAL	0	1	1	0
TUBERCULOSIS	162	127	154	206
TYPHOID FEVER, CASE	0	2	1	7

County of Orange Health Care Agency

PUBLIC HEALTH Bulletin

COUNTY OF ORANGE • HEALTH CARE AGENCY

Public Health Bulletin is published by the County of Orange Health Care Agency, Quality Management/Public Information under the direction of:

Mark Horton, MD, MSPH, *Health Officer*

Editorial Board:
Hildy Meyers, M.D., MPH, Medical Director, Epidemiology & Assessment
Amy Dale, Division Manager, Health Promotion and Prevention
Steven Wong, Director, Environmental Health Services

Editors:
Howard Sutter
Public Information
Pat Markley
Public Information
Carole Neustadt
Public Information

Public Health Bulletin provides up-to-date information on public health issues affecting the Orange County medical community. **PHB** welcomes your ideas, comments, and article submissions. Please direct all comments and/or questions to:

County of Orange Health Care Agency
Public Health Bulletin/QM
P.O. Box 355
Santa Ana, CA 92702
(714) 834-3166

DESKTOP PUBLISHING

Graphic Design and Layout produced by the HCA Desktop Publishing Unit -a part of HCA Public Information & Communications

If you would like to receive the *Public Health Bulletin* by e-mail, please send your electronic subscription request to **mediainfo@hca.co.orange.ca.us**. Please include your name, title, organization, address and e-mail address. If you choose to receive the *Public Health Bulletin* by e-mail, you will no longer receive a printed copy by U.S. mail.

COUNTY OF ORANGE • HEALTH CARE AGENCY
QUALITY MANAGEMENT
P.O. BOX 355
SANTA ANA, CA 92702